

What is claimed is:

1. A slim phone jack for a phone plug with a spring arm, the slim phone jack comprising:

5 an upper cover with a plurality of contact terminals to couple to a plurality of corresponding contact terminals of the phone plug;

 two sidewalls coupling to two sides of the upper cover, the two sidewalls forming a sliding tunnel allowing the phone plug to couple with the slim phone jack conveniently; and

10 a lower cover coupling to the two sidewalls, wherein the lower cover comprises a guiding slot formed by an opening.

 2. The slim phone jack of claim 1, wherein the upper cover, the lower cover, and the two sidewalls form a rectangular connecting entry.

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 3. The slim phone jack of claim 1, wherein the spring arm sticks out of a surface of the lower cover by way of the opening.

 4. The slim phone jack of claim 1, wherein the spring arm further comprises a
20 guiding block and the guiding block is guided by the opening of the guiding slot of the lower cover so that the corresponding contact terminals of the phone plug exactly couple to the contact terminals of the slim phone jack.

 5. The slim phone jack of claim 4, wherein the spring arm further comprises a
25 fixing edge and the fixing edge is shifted according to a deformation of the spring arm,

the fixing edge sticking out of a surface of the lower cover when the spring arm is free of force.

6. The slim phone jack of claim 4, wherein the spring arm further comprises a
5 release arm for releasing the phone plug from the slim phone jack, the fixing edge being pressed into the lower cover when the release arm is pressed.

7. The slim phone jack of claim 1, wherein the slim phone jack further comprises:

10 at least one fixing stud for fixing the slim phone jack on a printed circuit board;
at least one fixing foot for fixing on the printed circuit board; and
a plurality of signal transmitting feet for coupling to circuits of the printed circuit board to transmit signals.

15 8. The slim phone jack of claim 7, wherein the slim phone jack is a surface mount device (SMD) or a through hole device (THD).

9. The slim phone jack of claim 1, wherein the slim phone jack is a slim RJ-45 phone jack, a slim RJ-12 phone jack, or a slim RJ-11 phone jack.

20 10. A slim phone jack for a phone plug with a spring arm, the slim phone jack comprising:

an upper cover with a plurality of contact terminals to couple to a plurality of corresponding contact terminals of the phone plug;

25 two sidewalls coupling to two sides of the upper cover, the two sidewalls

forming a sliding tunnel to allow the phone plug to couple with the slim phone jack conveniently;

a lower cover coupling to the two sidewalls, wherein the lower cover comprises a guiding slot formed by an opening; and

5 a printed circuit board coupling to the lower cover, wherein the printed circuit board further comprises a fixing slot.

11. The slim phone jack of claim 10, wherein the upper cover, the lower cover, and the two sidewalls form a rectangular connecting entry.

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12. The slim phone jack of claim 10, wherein the spring arm sticks out of a surface of the lower cover by way of the opening to couple to the fixing slot of the printed circuit board.

15 13. The slim phone jack of claim 10, wherein the spring arm further comprises a guiding block and the guiding block is guided by the opening of the guiding slot of the lower cover so that the corresponding contact terminals of the phone plug exactly couple to the contact terminals of the slim phone jack.

20 14. The slim phone jack of claim 13, wherein the spring arm further comprises a fixing edge and the fixing edge is shifted according to a deformation of the spring arm, the fixing edge sticking out of a surface of the lower cover to couple a protrusion of the fixing slot when the spring arm is free of force.

25 15. The slim phone jack of claim 14, wherein the spring arm further comprises a

release arm for releasing the phone plug from the slim phone jack, the fixing edge being released from the fixing slot of the printed circuit board when the release arm is pressed.

5 16. The slim phone jack of claim 10, wherein the slim phone jack further comprises:

 at least one fixing stud for coupling to at least one corresponding fixing hole to fix the slim phone jack on a printed circuit board;

 at least one fixing foot for fixing on the printed circuit board; and

10 a plurality of signal transmitting feet for coupling to circuits of the printed circuit board to transmit signals.

 17. The slim phone jack of claim 16, wherein the slim phone jack is a surface mount device (SMD) or a through hole device (THD).

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 18. The slim phone jack of claim 10, wherein the slim phone jack is a slim RJ-45 phone jack, a slim RJ-12 phone jack, or a slim RJ-11 phone jack.